ABSTRACT

When performing simulation of a system having a plenty of components such as a physical phenomenon and a social phenomenon, there has been a problem that an enormous calculation time is required if the number of components increases. In order to solve this problem, an important component selection device is provided for selecting a component having a higher importance in the simulation calculation, so that the component having a higher priority is calculated firstly by a calculation device and the importance of the updated component is re-evaluated so as to be reflected in the calculation thereafter. When a high speed is required, the ranking of the important components are realized by hardware. Moreover, when a storage device has a plurality of candidate value data for each of the component data and the calculation device updates the candidate values one by one, the magnitude of variety of the candidate values is used as the importance of the component data and the component having this value which is large is calculated with a higher priority so that the calculation of the component having a small change is omitted, thereby increasing the simulation speed.